ABSTRACT

Title of Thesis:	A Case for Simulation: An Evaluation of the Use of Player and Gazebo to Identify Key Factors Contributing to Success During the 2004 and 2005 DARPA Grand Challenge (CNU Technical Report PCSE-2010)
Degree candidate:	Jason Clair Allen
Degree and Year:	Master of Science 2010
Thesis directed by:	Dr. David Hibler, Professor, Department of Physics, Computer Science, and Engineering

This technical report is a work of critical scholarship providing relevant technical data, justification for conclusions, and resolution of discrepancies supporting research documented by Master's Thesis "A Case for Simulation: An Evaluation of the Use of Player and Gazebo to Identify Key Factors Contributing to Success During the 2004 and 2005 DARPA Grand Challenge". An analysis of objective evidence available through review of published records was performed. The analysis supports a conclusion that system integration was the fundamental problem of the Grand Challenge. During the analysis, key factors contributing to the success of teams participating in the 2004 and 2005 DARPA Grand Challenge were identified. The use of simulation as a tool which would have allowed teams to identify some of these key factors prior to the Grand Challenge was proposed.